

BS



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,506	02/10/2004	Robert P. Smyj	PT-2063001	8702

23607 7590 11/12/2004

IVOR M. HUGHES, BARRISTER & SOLICITOR,
PATENT & TRADEMARK AGENTS
175 COMMERCE VALLEY DRIVE WEST
SUITE 200
THORNHILL, ON L3T 7P6
CANADA

EXAMINER

HUANG, EVELYN MEI

ART UNIT	PAPER NUMBER
----------	--------------

1625

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/774,506

Applicant(s)

SMYJ ET AL.

Examiner

Evelyn Huang

Art Unit

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Claims 1-13 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is recommended that claims be written in the alternative/singular format, i.e. 'A process for making a compound

- a. Claim 1,

- The term 'derivatives' is open-ended and is therefore indefinite. Replacing it with 'compound' is recommended.
- The meaning of the term 'general' in 'the general formula' is unclear. Its deletion is recommended.
- Definition of R1 and R2, the metes and bounds of 'part of a heterocyclic structure' is unclear in that a full description of the size, the make-up of the 'heterocyclic structure' is not found in the specification.
- Definition of R3, the meaning of 'aromatic group' is unclear. does it include aryl and heteroaryl? A full description thereof is not found in the specification.
- Definition of R3, it is unclear what are the 'combinations of thereof'. A full description of the combinations of 'alkyl, alkenyl, and aromatic group' is not found in the specification.

- b. Claim 3,

Art Unit: 1625

- Definition of R4, the meaning of 'aromatic group' is unclear. does it include aryl and heteroaryl? A full description thereof is not found in the specification.
 - Definition of R4, it is unclear what are the 'combinations of thereof'. A full description of the combinations of 'alkyl, alkenyl, and aromatic group' is not found in the specification.
- c. Claim 9, it is unclear what is the 'equivalent' of 'toluene'? A definition is not found in the specification.
- d. Claim 10 is an independent claim. However, 'compound of formula 1' as recited is not defined in the claim.
- d. Claim 13, it is unclear what is the 'equivalent' of 'toluene'? A definition is not found in the specification.

The rejection is applicable to claims dependent on the above claims.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is unclear how the dehydroxylation of compound 5 having a *Z*-substituted phenyl in the presence of an iodosilane would lead to compound 6 having a *o-chloro*, *Z*-substituted phenyl, especially when the source of the chloro is not recited in the claims, or in the specification.

Starting materials, especially those wherein R1 and R2 are part of a heterocyclic structure, iodosilanes or chlorosilanes wherein R3 or R4 are combinations of alkyl, alkenyl, alkynyl and aromatic groups, which are not fully described in the specification (see paragraph 2

Art Unit: 1625

above), are not seen but required. Sources are particularly pertinent especially when the structures of these compounds are not described. Absent sources, the public is offered mere language, rather than enablement. Ex parte Moersch 104 USPQ 122. In re Howarth 210 USPQ 689.

Conclusion

4. Horne (6495691, PTO-1449) only teaches the dehydroxylation reaction in the presence of SnCl_2/HCl (Scheme 7).


Stoner (Heterocycles, 1979, 12(11): 1479-82, PTO-1449) teaches the dehydroxylation of biarylmethanols in the presence of TMSI. However, TMSI is also known to react with ester group (Olah, J. Org. Chem. 1979, 44(8): 1247-1251, PTO-1449), thereby teaching away from the instant process for making the instant compound having a carboxyl or alkyloxycarbonyl moiety.

Absent is the motivation to modify the prior art process, alone or in combination, to arrive at the instant invention.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 571-272-0686. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Evelyn Huang
Primary Examiner
Art Unit 1625